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10/663,397

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Robert L. Koelzer

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STAMFORD, CT 06905-5619

EXAMINER

KING, BRADLEY T

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ROBERT L. KOELZER

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Appeal 2009-006419  
Application 10/663,397  
Technology Center 3600

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Decided: September 21, 2009

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Before WILLIAM F. PATE III, JOHN C. KERINS, and  
STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

WILLIAM F. PATE III, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF CASE

This is an appeal from the final rejection of claims 69-74, 76-86 and 91. Claims 1-68 have been cancelled and claims 75 and 87-90 stand withdrawn. We have jurisdiction over the appeal under 35 U.S.C. §§ 134 and 6.

The claimed invention is a system for regulating the supply of power to a vehicle's brake system.

Claim 69, reproduced below, is further illustrative of the claimed subject matter.

69. A system for regulating the supply of power to a vehicle's brake system, comprising:

an engine;

a supply device driven by said engine for supplying an agency;

a motor driven by the agency supplied by said supply device;

a brake power source driven by said motor;

a brake system powered by said brake power source; and

an electronic control unit in communication with said supply device that controls that rate at which the agency is supplied by said supply device;

wherein said electronic control unit has at least one input for receiving signals containing information reflecting air pressure; and

wherein said electronic control unit determines the rate at which to cause said supply device to supply the agency to said motor based at least in part on the received information, thereby causing said motor to drive said brake power source at a desired rate.

## REFERENCES

The references of record relied upon by the examiner as evidence of obviousness are:

Uwe (as translated)	DE 3529743 A1	Feb. 26, 1987
Eslinger	US 5,613,744	Mar. 25, 1997
Bruehmann	US 6,089,831	Jul. 18, 2000
Koelzer	US 6,439,857 B1	Aug. 27, 2002

## REJECTIONS

Claims 69-73, 76-79, and 91 stand rejected under 35 U.S.C. § 103 as unpatentable over Uwe in view of Bruehmann.

Claims 74 and 82-86 stand rejected under 35 U.S.C. § 103 as unpatentable over Uwe in view of Bruehmann, as applied to claim 69, and further in view of Eslinger.

Claims 80-81 stand rejected under 35 U.S.C. § 103 as unpatentable over Uwe in view of Bruehmann, as applied to claim 79, and further in view of Koelzer.

## ISSUE

According to Appellant, neither Uwe nor Bruehmann discloses using an electronic control unit to receive information reflecting air pressure and using this information to control the rate at which a supply device supplies an agency to a brake power source. Accordingly, the issue for our consideration on appeal is whether Appellant has established that the Examiner erred in finding that the applied prior art discloses an electronic control element which controls the rate a supply device supplies an agency to a brake power source motor.

## OPINION

We have carefully reviewed the rejections on appeal in light of the arguments of Appellant and the Examiner. As a result of this review, we determine that Appellant has established that the Examiner erred in finding the subject matter claimed prima facie obvious. Therefore, the rejections of the claims on appeal are reversed. Our reasons follow.

The following comprises our Finding of Facts concerning the scope and content of the prior art and the differences between the prior art and the claimed subject matter. Uwe discloses a supply device, motor 27 that drives a compressor 28 for supply of air to an air brake system. See page 6, ll. 10-20. The motor 27 is driven by an agency, i.e., hydraulic fluid supplied by the pump 12 which is driven by the engine 10 of the vehicle. See page 6, ll. 2 and 3. However, in the Fig. 1 embodiment of Uwe, the pumps 11 and 12 are disclosed as constant output pumps, and the electronic control unit 53 does not vary any rate to cause the supply device, pump 12, to adjust the supply of the agency to motor 27. We note for the record, however, that the electronic control unit 53 has at least one input for receiving signals containing air pressure information from the supercharger 25. See page 7, ll. 10-16.

In the Fig. 2 embodiment of Uwe, the pumps shown are two two-flow or dual capacity pumps. See page 9, l. 8. In the Fig. 3 embodiment, Uwe does disclose an adjustable pump 82, but this pump 82 is for supplying the supercharger compressor while the two-flow pump is utilized by the braking system, the generator, the cooling fan and the steering unit.

Finally, the Fig. 4 embodiment again shows a variable pump 95, but the pump 95 appears to be merely pressure controlled by pressure control

valve 96. See page 11, l. 5. The outputs of the hydraulic motors 99, 100, 101, 102 are controlled electrically by the electronic control unit 53. See page 11, ll. 7-15. Therefore, we are in agreement with Appellant that Uwe does not disclose an electronic control unit which receives information reflecting air pressure and uses this information to control the rate at which a supply device supplies an agency to a brake power source motor.

To supply this missing teaching, the Examiner turns to the patent to Bruehmann. Bruehmann discloses an air supply system for the air brakes of a motor vehicle. The system includes drive motor 13, coupled electrically to an air compressor 11. See col. 3, ll. 66 – col. 4, l. 6. Bruehmann works on the principle that the electronic control unit 57 will control pilot valves 44.1, 44.2, 44.3, 44.4, and 44.5 to shift overflow valves 40.1 to 40.5 to control the amount of air supplied to the pressure tanks 37.1 to 37.5. The electronic control unit 57 is provided with temperature (col. 8, l. 1), humidity (col. 7, l. 66-67), and pressure ( col. 5, ll. 35-41) data to control the system. While we agree with the Examiner that air pressure and temperature for controlling compressor operation are well known in the art as demonstrated by Bruehmann, we note that Bruehmann does not disclose using air pressure and temperature to control a hydraulic pump or a supply device that supplies fluid to a motor to drive a compressor. In fact, if the system of Bruehmann were placed in the hydrostatic drive disclosed by Uwe, it would substitute for the dashed box around motor 27 and valves 33. In other words, Bruehman only teaches a subset of the claimed invention, and even if the subset were placed in the hydrostatic drive of Uwe, it would still not be a teaching of a control unit to receive information reflecting air pressure and using the information to control the rate at which a supply device supplies an

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agency to a brake power source motor.

We have further considered the teachings of Eslinger and Koelzer but we find therein no disclosure that would remedy the elements missing from the combined teachings of Uwe and Bruehmann. Accordingly, the Appellant has established that the Examiner erred in rejecting claims 69-74, 76-86, and 91 under § 103 of the statute. Therefore, the rejections of these claims are reversed.

REVERSED

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